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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,189	01/10/2002	Kazuhiro Shitama	09792909-5309	6186

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EXAMINER

WANG, LIANG-CHE

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/043,189	Applicant(s) SHITAMA, KAZUHIRO	
	Examiner Liang-che Alex Wang	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4 and 6-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4 and 6-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 4, 6-16 are presented for examination.

Response to Arguments

2. Applicant's arguments filed 10/17/2005, have been fully considered but they are not persuasive.
3. In that remarks, applicant's argues in substance:
 - a. That: prior art does not disclose " a terminal device that belongs to the network domain and has an IP address comprising a network prefix and an interface ID, said network prefix being assigned to said network domain and said interface ID being uniquely assigned within said network domain" and "a router connected to said network domain having a memory to store said interface ID paired within information of the next hop address for each terminal device in said network domain" (page 9, Remark)

This is found not persuasive because Katsube does teach a terminal device (sending host 311, figure 3) that belongs to the network domain and has an IP address (see figure 3, each node is associated with an IP address) comprising a network prefix and an interface ID (Col 7 lines 27-33 indicates that under IPv6 environment, addresses are address prefix indicating a network, and the Flow ID of IPv6 corresponds to the interface ID) , said network prefix being assigned to said network domain (Col 7 lines 32-33) and said interface ID being uniquely assigned within said network domain (Col 7 lines 27-31); and a router (routers

341-343, figure 3) connected to said network (figure 3) having a memory (figures 11 and 12) to store said interface ID (Flow ID) paired with information of the next hop address for each terminal device in said network domain (Col 2 lines 9-13).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 4, 6-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Katsube et al., US Patent Number 6,188,689, hereinafter Katsube.
6. Referring to claim 1, Katsube teaches, an information processing device for sending data to a terminal device connected to a network domain made up of an aggregate of subnetworks (Col 2 lines 4-11), said device comprising:
- a. a terminal device (sending host 311, figure 3) that belongs to the network domain and has an IP address (see figure 3, each node is associated with an IP address) comprising a network prefix and an interface ID (Col 7 lines 27-33 indicates that under IPv6 environment, addresses are address prefix indicating a network, and the Flow ID of IPv6 corresponds to the interface ID) , said network prefix being assigned to said network domain (Col 7 lines 32-33) and said interface ID being uniquely assigned within said network domain (Col 7 lines 27-31);

- b. a router (routers 341-343, figure 3) connected to said network (figure 3) having a memory (figures 11 and 12) to store said interface ID (Flow ID) paired with information of the next hop address for each terminal device in said network domain (Col 2 lines 9-13);
 - c. said router being configured to determine, upon receiving data, whether or an interface ID specified in the data is stored in the memory (Col 17 lines 29-49); and upon determining that said interface ID is stored in the memory, to transfer said data in accordance with the next hop address (Col 17 lines 29-36).
- 7. Referring to claim 4, Katsube teaches an information processing device according to claim 1, wherein said router transfer said data to a second network domain made of an aggregate of a plurality of subnetworks when said router determines that said interface ID is not stored in said memory (Col 17 lines 37-49).
- 8. Referring to claims 6-8, claims 6-8 encompass the same scope of the invention as that of the claim 1. Therefore, claims 6-8 are rejected for the same reason as the claim 1.
- 9. Referring to claim 9, Katsube teaches a network system (figure 3), using Internet Protocol Version 6 (Col 7 lines 27-31) comprising,
 - a. a backbone network (figure 3);
 - b. a first router (router 341) connected to said backbone network to manage said plurality of subnetworks as network domain (Col 5 line 54 – Col 6 line 5);
 - c. a second router to manage a subnetwork in said network domain (Col 6 lines 9-14);

- d. at least one terminal device (items 311, 312) connected to a subnetwork in said network domain (figure 3);
 - e. wherein each terminal device has an IP address (see figure 3, each node is associated with an IP address) comprising a network prefix and an interface ID (Col 7 lines 27-33 indicates that under IPv6 environment, addresses are address prefix indicating a network, and the Flow ID of IPv6 corresponds to the interface ID), said network prefix being assigned to said network domain (Col 7 lines 32-33) and said interface ID being uniquely assigned within said network domain (Col 7 lines 27-31).
10. Referring to claim 10, Katsube teaches the network system of claim 9, wherein said first router has a first routing table to store said interface ID paired with a next hop address for each terminal device in said domain (Col 2 lines 9-13, Col 5 line 63 –Col 6 line 5).
11. Referring to claim 11, Katsube teaches the network system of claim 10, wherein said second router has a second routing table to store said interface ID paired with a next hop address for each terminal device in said subnetwork managed by said second router (Col 2 lines 9-13, Col 6 lines 9-14)).
12. Referring to claim 12, Katsube teaches the network system of claim 11, where, upon a data packet being received by said first or second router, said first or second router determines whether or not an interface ID specified in said data packet is stored in the respective first or second routing table (Col 17 lines 29-49).
13. Referring to claim 13, Katsube teaches the network system of claim 12, wherein, if said first or second router determines that the interface ID specified in said data packet is

stored in the respective routing table, said first or second router transfers said data packet in accordance with said next hop address corresponding to said interface ID stored in the routing table (Col 17 lines 29-36).

14. Referring to claim 14, Katsube teaches the network system of claim 12, wherein, if said first or second router determines that the interface ID specified in said data packet is not stored in the respective routing table, the first or second router transfers said data packet in accordance with information stored in a default entry in the respective first or second routing table (Col 17 lines 37-49).

15. Referring to claim 15, Katsube teaches the network system of claim 12, wherein said first and second routing tables are updated when a terminal device moves to another subnetwork in said network domain (Col 14 lines 45-50).

16. Referring to claim 16, Katsube teaches the network system of claim 9, wherein said interface ID is contained within the lower 64 bits of the IPv6 address (Col 7 lines 27-31, Figure 8).

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is reminded that in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objection made. Applicant must show how the amendments avoid such references and objections. See 37 CFR 1.111(c).

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liang-che Alex Wang whose telephone number is (571)272-3992. The examiner can normally be reached on Monday thru Friday, 8:30 am to 5:00 pm.

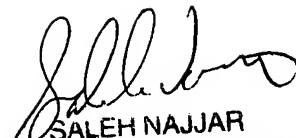
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571)272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Liang-che Alex Wang 
January 5, 2006


SALEH NAJJAR
SUPERVISORY PATENT EXAMINER